

## **SCHEDULE 9.2.1**

### **LOCAL LOOPS**

Subject to **Section 1.1** of **Schedule 9.5**, Ameritech shall allow Requesting Carrier to access the following Loop types (in addition to those Loops available under applicable tariffs) unbundled from Local Switching and Interoffice Transmission Facilities.

**"2-Wire Analog Voice Grade Loop" or "Analog 2W,"** which supports analog transmission of 300-3000 Hz, repeat loop start, loop reverse battery, or ground start seizure and disconnect in one direction (toward the End Office Switch), and repeat ringing in the other direction (toward the Customer) and terminates in a 2-Wire interface at both the central office MDF and the customer premises. Analog 2W includes Loops sufficient for the provision of PBX trunks, pay telephone lines and electronic key system lines. Analog 2W will be provided in accordance with the specifications, interfaces, and parameters described in Technical Reference AM-TR-TMO-000122, Ameritech Unbundled Analog Loops.

**"4-Wire Analog Voice Grade Loop" or "Analog 4W,"** which supports transmission of voice grade signals using separate transmit and receive paths and terminates in a 4-wire electrical interface at both ends. Analog 4W will be provided in accordance with the specifications, interfaces, and parameters described in Technical Reference AM-TR-TMO-000122, Ameritech Unbundled Analog Loops.

**"2-Wire ISDN 160 Kbps Digital Loop" or "BRI-ISDN"** which supports digital transmission of two 64 Kbps bearer channels and one 16 Kbps data channel (2B+D). BRI-ISDN is a 2B+D Basic Rate Interface-Integrated Services Digital Network (BRI-ISDN) Loop which will meet national ISDN standards and conform to Technical Reference AM-TR-TMO-000123, Ameritech Unbundled Digital Loops (including ISDN).

**"2-Wire ADSL-Compatible Loop" or "ADSL 2W"** is a transmission path which facilitates the transmission of up to a 6 Mbps digital signal downstream (toward the Customer) and up to a 640 Kbps digital signal upstream (away from the Customer) while simultaneously carrying an analog voice signal. An ADSL-2W is provided over a 2-Wire, non-loaded twisted copper pair provisioned using revised resistance design guidelines and meeting ANSI Standard T1.413-1995 and AM TR--TMO-000123. An ADSL-2W terminates in a 2-wire electrical interface at the Customer premises and at the Ameritech Central Office frame. ADSL technology can only be deployed over Loops which extend less than 18 Kft. from Ameritech's Central Office. ADSL compatible Loops are available only where existing copper facilities can meet the ANSI T1.413-1995 specifications.

**“2-Wire HDSL-Compatible Loop” or “HDSL 2W”** is a transmission path which facilitates the transmission of a 768 Kbps digital signal over a 2-Wire, non-loaded twisted copper pair meeting the specifications in ANSI T1E1 Committee Technical Report Number 28. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 and AM-TR-TMO-000123 specifications.

**“4-Wire HDSL-Compatible Loop” or “HDSL 4W”** is a transmission path which facilitates the transmission of a 1.544 Mbps digital signal over two 2-Wire, non-loaded twisted copper pairs meeting the specifications in ANSI T1E1 Committee Technical Report Number 28 and AM TR-TMO-000123. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 specifications.

**“4-Wire 64 Kbps Digital Loop” or “4-Wire 64 Digital”** is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 64 Kbps and terminates in a 4-Wire electrical interface at both the Customer premises and on the MDF in Ameritech's Central Office. 4-Wire 64 Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-000123.

**“4-Wire 1.544 Mbps Digital Loop” or “1.544 Mbps Digital”** is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 1.544 Mbps and terminates in a 4-Wire electrical interface at the Customer premises and on the DSX frame in Ameritech's Central Office. 1.544 Mbps Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-00023.

## **SCHEDULE 9.2.2**

### **UNBUNDLED ACCESS TO NETWORK INTERFACE DEVICES**

Ameritech's Network Interface Device ("NID") is a Network Element that utilizes a cross-connect device to connect loop facilities to inside wiring.

Ameritech will permit Requesting Carrier to connect Requesting Carrier's loop to the inside wiring of the Customer's premises through Ameritech's NID, where necessary. Requesting Carrier must establish the connection to Ameritech's NID through an adjoining NID which serves as the network interface or demarcation for Requesting Carrier's loop.

Maintenance and control of premises (inside wiring) is under the control of the Customer. Any conflicts between service providers for access to the Customer's inside wire must be resolved by the Customer.

## **SCHEDULE 9.2.3**

### **SWITCHING CAPABILITY**

**1.0 Local Switching.** The local switching capability of a Network Element ("Unbundled Local Switching") is defined as:

- (1) line-side facilities, which include the connection between a Loop termination at the Main Distribution Frame and a switch line card;
- (2) trunk-side facilities, which include the connection between trunk termination at a trunk-side cross- connect panel and a switch trunk card; and
- (3) all features, functions, and capabilities of the switch available from the specific port type (line side or trunk side port), which include:
  - (a) the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to Ameritech's Customers, such as a telephone number, white page listing, and dial tone;
  - (b) access to operator services, directory assistance and 9-1-1;
  - (c) all other features that the switch provides, including custom calling, CLASS features and Centrex; and
  - (d) The customized routing functions that are required under this Agreement that are available from the switch.

Unbundled Local Switching may be subscribed to on a per port basis with the requirement of a minimum of one Unbundled Local Switching ("ULS") trunk port. Each Centrex port must be associated with a Centrex Common Block.

When ULS is provided by an Ameritech Switch, Requesting Carrier will receive Customer Usage Data and billing information in accordance with the requirements of **Section 10.16**.

## **2.0 Tandem Switching.**

2.1 The Tandem Switching Capability Network Element is defined as:

- (1) an unbundled Network Element in Ameritech's Class 4 non-TOPS digital Tandem Switches, which includes DS1-level Interconnection with the Tandem Switch trunk ports at the Digital Signal Cross-Connect (DSX) frame.
- (2) the basic switching function of creating a temporary transmission path that connects Requesting Carrier's trunks to the trunks of Ameritech, IXC's, ICO's, CMRS, and other LECs interconnected to the Tandem Switch.

2.2 Interconnecting trunk types which can be switched include FGB, FGD, IMT, Access Toll Connecting Trunks and OS/DA. Signaling support includes MF and SS7 and any signaling conversions between these signaling formats.

2.3 Variations in Tandem Switching equipment used to provide service in specific locations may cause differences in the operation of certain features.

2.4 The unbundled Tandem Switching Network Element will provide to Requesting Carrier all available basic Tandem Switching functions and basic capabilities that are centralized in the Tandem Switch (and not in End Office Switches), including the following functions Ameritech makes available to its Customers:

- (1) Routing of calls from an inbound trunk to an outbound trunk based on destination digits.
- (2) Routing of Equal Access or Operator Service calls from an inbound trunk to an outbound trunk based on the CIC forwarded by the inbound trunk.
- (3) Routing of calls based on queries to Ameritech's databases (e.g., 800, AIN and LRN).

2.5 Translations, screening, blocking, and route indexing are provided if technically feasible under the standard switching translations and screening in use in that switch. A request for translations, screening, blocking, route indexing other than what is available (i.e., features that the switch is capable of providing) in that switch will be provided where technically feasible as a Bona Fide Request. Ameritech will provide these features if technically feasible and upon agreement by Requesting Carrier to pay the applicable recurring and nonrecurring costs of developing, installing, providing and maintaining the capability. Variations in the Tandem Switching equipment or translation and screening used to provide service in specific locations may cause differences in the operation of the element.

## SCHEDULE 9.2.4

### INTEROFFICE TRANSMISSION FACILITIES

Interoffice Transmission Facilities are Ameritech transmission facilities dedicated to a particular Customer or carrier, or shared by more than one Customer or carrier, used to provide Telecommunications Services between Central Offices owned by Ameritech or between Central Offices owned by Ameritech and Requesting Carrier, as provided on this **Schedule 9.2.4**.

1. Subject to Section 1.4 below, Ameritech shall make available to Requesting Carrier access to the following types of unbundled Interoffice Transmission Facilities:

1.1. Unbundled Dedicated Interoffice Transmission Facilities ("**Dedicated Transport**") are dedicated facilities connecting two Ameritech Central Offices that utilize Ameritech transmission equipment and that provide Requesting Carrier exclusive use of such facilities. In each Central Office, Requesting Carrier will Cross-Connect this facility to its own transmission equipment (physically or virtually) Collocated in each Central Office. Requesting Carrier may combine this facility with other unbundled Network Elements it purchases access from Ameritech. All applicable digital Cross-Connect, multiplexing, and Collocation space charges apply at an additional cost.

1.2. "**Unbundled dedicated entrance facility**" is a dedicated facility connecting (i) Ameritech's transmission equipment in an Ameritech Central Office with Requesting Carrier's transmission equipment in Requesting Carrier's Central Office and (ii) Ameritech's transmission equipment in an Ameritech Central Office with Requesting Carrier's transmission equipment designated by the Requesting Carrier in an IXC POP, in each case for the purposes of providing Telecommunications Services.

1.3. Unbundled Shared Interoffice Transmission Facilities ("**Shared Transport**") provide Requesting Carrier nonexclusive use of the features, functions and capabilities of Interoffice Transmission Facilities: (i) between a Requesting Carrier-designated Ameritech End Office Switch and the Ameritech Tandem Switch which that End Office Switch subtends and (ii) which are shared by more than one customer or carrier.

1.4. Ameritech shall be required to make available to Requesting Carrier access to unbundled Interoffice Transmission Facilities (i) between its End Offices, and (ii) between any of its Central Offices and (x) Requesting Carrier's Central Offices or (y) any other third party's Central Offices, only where such interoffice facilities exist at the time of Requesting Carrier's request.

## **SCHEDULE 9.2.5**

### **SIGNALING NETWORKS AND CALL-RELATED DATABASES**

#### **1.0 Signaling Transfer Points.**

A Signaling Transfer Point (STP) is a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPSs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches.

#### **1.1. Technical Requirements.**

1.1.1. STPs shall provide access to all other Network Elements connected to Ameritech SS7 network. These include:

- 1.1.1.1. Ameritech Local Switching or Tandem Switching;
- 1.1.1.2. Ameritech Service Control Points/Databases;
- 1.1.1.3. Third-party local or tandem switching systems; and
- 1.1.1.4. Third-party-provided STPSs.

1.1.2. The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to the Ameritech SS7 network. This explicitly includes the use of the Ameritech SS7 network to convey messages which neither originate nor terminate at a Signaling End Point directly connected to the Ameritech SS7 network (i.e., transient messages). When the Ameritech SS7 network is used to convey transient messages, there shall be no alteration of the Integrated Services Digital Network User Part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.

1.1.3. If an Ameritech Tandem Switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between a Requesting Carrier local switch and third party local switch, the Ameritech SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between the Requesting Carrier local STPSs and the STPSs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to the Ameritech STPSs, based on the routing instruction provided in each message.

1.1.4. STPs shall provide all functions of the MTP as specified in ANSI T1.111. This includes:

- 1.1.4.1. Signaling Data Link functions, as specified in ANSI T1.111.2;
- 1.1.4.2. Signaling Link functions, as specified in ANSI T1.111.3; and
- 1.1.4.3. Signaling Network Management functions, as specified in ANSI T1.111.4.

1.1.5. STPs shall provide all functions of the signaling connection control part (□SCCP□) necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. In cases where the destination signaling point is an Ameritech local or tandem switching system or database, or is a Requesting Carrier or third party local or tandem switching system directly connected to the Ameritech SS7 network, STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the Ameritech SS7 network, and shall not perform SCCP Subsystem Management of the destination.

1.1.6. STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118, when this capability becomes available on Ameritech STPs.

1.1.7. STPs shall provide all functions of the OMAP commonly provided by STPs. This includes:

- 1.1.7.1. MTP Routing Verification Test (MRVT); and
- 1.1.7.2. SCCP Routing Verification Test (SRVT).

1.1.8. In cases where the destination signaling point is an Ameritech local or tandem switching system or database, or is a Requesting Carrier or third party local or tandem switching system directly connected to the Ameritech SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in an SS7 network connected with the Ameritech SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI standards and available capabilities of Ameritech STPs.

1.1.9. STPs shall be equal to or better than the following performance requirements:



1.1.9.1. MTP Performance, as specified in ANSI T1.111.6; and

1.1.9.2. SCCP Performance, as specified in ANSI T1.112.5.

## **1.2. Signaling Link Transport.**

1.2.1. Definition. Signaling Link Transport is a set of two (2) or four (4) dedicated 56 Kbps transmission paths between Requesting Carrier-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.

### **Technical Requirements.**

1.2.2. Signaling Link Transport shall consist of full duplex mode 56 Kbps transmission paths.

1.2.3. Of the various options available, Signaling Link Transport shall perform in the following two (2) ways:

- a) As an "A-link" which is a connection between a switch or SCP and a Signaling Transfer Point Switch (STPS) pair; and
- b) As a "D-link" which is a connection between two (2) STP mated pairs in different company networks (e.g., between two (2) STPS pairs for two Competitive Local Exchange Carriers (CLECs)).

1.2.4. Signaling Link Transport shall consist of two (2) or more signaling link layers as follows:

- a) An A-link layer shall consist of two (2) links.
- b) A D-link layer shall consist of four (4) links.

1.2.5. A signaling link layer shall satisfy a performance objective such that:

- a) There shall be no more than two (2) minutes down time per year for an A-link layer; and
- b) There shall be negligible (less than two (2) seconds) down time per year for a D-link layer.

1.2.6. A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:

- a) No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two (2) separate physical paths end-to-end); and
- b) No two (2) concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-to-end).

1.2.7. Interface Requirements. There shall be a DS1 (1.544 Mbps) interface at the Requesting Carrier-designated SPOI. Each 56 Kbps transmission path shall appear as a DS0 channel within the DS1 interface.

## **2.1. Toll Free Database Services.**

2.1.1. Call Routing Service. The Call Routing Service provides for the identification of the carrier to whom a call is to be routed when a toll-free (1+800-NXX-XXXX or 1+888-NXX-XXXX) call is originated by Customer. This function uses the dialed digits to identify the appropriate carrier and is done by screening the full ten digits of the dialed number. The Call Routing Service may be provided in conjunction with a Customer's InterLATA or IntraLATA Switched Exchange Access Service.

When 800 Call-Routing service is provided, an originating call is suspended at the first switching office equipped with a Service Switching Point (SSP) component of the SSC/SS7 Network. The SSP launches a query over signaling links (A-links) to the Signal Transfer Point (STP), and from there to the SCP. The SCP returns a message containing the identification of the carrier to whom the call should be routed and the call is processed.

2.1.2. Routing Options. In addition to the toll-free service offerings, new routing options are offered. These options are purchased by toll-free service providers to allow their clients to define complex routing requirements on their toll-free service. Toll-free routing options allow the service provider's Customer to route its toll-free calls to alternate carriers and/or destinations based on time of day, day of week, specific dates or other criteria. These routing options are in addition to the basic toll-free call routing requirements which would include the toll-free number, the intraLATA carrier, the interLATA carrier and the Area of Service (AOS).

2.1.3. Carrier Identification. Requesting Carrier may choose the 800 Carrier Identification service to obtain toll-free number screening. With this service, Requesting Carrier will launch a query to the Ameritech database using its own Service Switching Points (SSPs)

network. In contrast to the Call Routing Service described in **Section 2.1.1** above, with the 800 Carrier Identification service, no routing is performed.

Requesting Carrier's SS7 network is used to transport the query from its End Office to the Ameritech SCP. Once Requesting Carrier's identification is provided, Requesting Carrier may use the information to route the toll-free traffic over its network. In these cases, Ameritech Switched Access services are not used to deliver a call to Requesting Carrier. The toll-free carrier ID data may not be stored for Requesting Carrier's future use.

2.1.4. **Number Administration.** Requesting Carrier, at its option, may elect to use Ameritech's toll-free Service which includes toll-free Number Administration Service (NAS). With this service, Ameritech will perform the Responsible Organization service, which involves interacting with the national Service Management System (SMS/800), on behalf of the Customer. Responsible Organization services include activating, deactivating and maintaining 800/888 number records as well as trouble referral and clearance. If Requesting Carrier does not select NAS, Requesting Carrier will perform the Responsible Organization service.

## **2.2. LIDB Database Service.**

2.2.1. The Line Information Database (LIDB) Query Response Service is a validation database system. It enables Requesting Carrier to offer alternately billed services to its Customers. The database provides an efficient way to validate calling cards and toll billing exception (TBE) (*i.e.*, restricts a collect or third-party billed call). Toll fraud protection and reduced call set up expenses are among the benefits of the service.

2.2.2. Billing information records include the Customer name, phone number security personal identification numbers and third-party acceptance indications. Prior to call completion, a query is launched to the LIDB to determine the validity of the requested billing method. The call is then completed or denied based on the LIDB's response.

## **2.3. CNDS Database Service.**

2.3.1 Caller ID identifies a calling party's telephone number through a switch-based feature installed in Ameritech's Central Office. CNDS is a CCIS/SS7 network based feature that accesses a CNDS database within the LIDB to provide a name associated with the calling party's telephone number. This service is provided using TR1188 protocol.

2.3.2 A Customer who subscribes to Caller ID with Name will see the listed name associated with the calling party's telephone line displayed on his/her Caller ID display unit. The telephone number associated with the telephone line of the calling party will also be displayed.

2.3.3 Ameritech shall charge Requesting Carrier for the CNDS Database Service in a similar manner to that which Ameritech charges Requesting Carrier for the LIDB Database Service, including a per query charge.

## **2.4 Local Number Portability.**

2.4.1 Ameritech's provision of LNP will utilize LRN switch software based on requirements developed by the workshop participants and concurred in by the Commission. These requirements are fully compliant with the principles adopted by the FCC in its First Report and Order, CC Docket No. 95-116 (the "**Number Portability Order**"). The detailed description and technical specifications for the planned LRN implementation can be found in various documents produced by the FCC Local Number Portability workshop.

2.4.2 Ameritech is fully prepared to provide LNP database access to Requesting Carrier. However, in adopting its Number Portability Order, the FCC referred certain technical and other issues to the North American Numbering Council (NANC) and issued a further notice addressing the recovery of costs associated with LNP implementation. Until these activities are concluded, Ameritech cannot finalize product descriptions and rates for access to its LNP database. Nonetheless, Ameritech is willing to begin discussions with Requesting Carrier to discuss Requesting Carrier's access to Ameritech's LNP databases in lieu of constructing Requesting Carrier's own.

## **2.5. Unbundled AIN Application Process.**

2.5.1. The AIN architecture establishes a network infrastructure in which subscriber services can be defined and implemented independent from End-Office Switches. This is accomplished by a combination of SS7 signaling, interfaces between Network Elements and call-state models through which AIN Network Elements interact.

2.5.2. Ameritech's Unbundled AIN (Advanced Intelligent Network) Applications Access service will be provided on a nondiscriminatory basis and enable Requesting Carrier (whether it purchases unbundled switching capabilities from Ameritech or owns its own SSP (Service Switching Point)) to offer its Customers AIN services. Ameritech will make available existing AIN retail applications, as well as newly created services that Requesting Carrier creates via the Ameritech AIN Service Creation Environment (SCE) Access service. Unbundled AIN Applications Access provides for the AIN functionality necessary for the day to day ongoing call processing associated with a specific AIN applications execution. This includes the SS7 transport and SCP processing of the query associated with the specific service.

2.5.3. Associated with the AIN SCP is a Service Creation Environment (SCE) and a Service Management System (SMS). Ameritech offers access to the Ameritech SMS and SCE capabilities via two (2) AIN offerings: AIN Service Creation Environment Access Service and AIN Service Management System Access Service.

2.5.4. Carriers will share the common AIN infrastructure components provided by Ameritech, such as a Service Control Point (SCP), a Signaling Transfer Point (STP), Service Management System (SMS), and, if Requesting Carrier purchases Unbundled Switching from Ameritech, the AIN Service Switching Point (SSP). Requesting Carrier shall be responsible for assuring the compatibility of its AIN SSP software generics with the Ameritech AIN Applications and SCP software releases. Interconnection of the Requesting Carrier SSP with the Ameritech SS7 network is required, and can be accomplished in a number of ways.

2.5.5. Activation of the desired application at the Ameritech SCP requires subscription by both the Requesting Carrier and the end-user. In general, AIN operations require close cooperation between Ameritech and the Requesting Carrier.

2.5.6. The SSP and SCP vendors provide logical capabilities which Ameritech uses to create each AIN service. The SSP and SCP vendors have no knowledge of the specific AIN Applications that Ameritech has created. Ameritech's AIN deployment is based on AIN 0.1.

**3.1. AIN Service Creation Environment Access Service.** Access to Ameritech's AIN service creation functionality will be provided in a nondiscriminatory manner to Requesting Carrier to enable it to create new AIN services on Ameritech's network. If Requesting Carrier has a new AIN service concept, it can utilize all or some of the features below to obtain a fully functional AIN service. Ameritech will furnish Requesting Carrier with a list of AIN Applications and the switches on which such applications are available, including the software version of AIN on such switch type. The following is a list of AIN service creation functions available via this service offering. When this service is ordered by Requesting Carrier, Requesting Carrier shall be responsible for the steps described in subsections 3.1.1 to 3.1.4, if applicable, and Ameritech shall, subject to Requesting Carrier's agreement to pay applicable charges specified in this Agreement, be responsible for the steps described in subsections 3.1.5 to 3.1.10:

3.1.1. Service Concept Description: The description of service idea should detail requirements such as: dialing patterns, information exchange, announcements, voice prompts, expected service management screens and reports, and CPE requirements. The AIN service creation functions made available to Requesting Carrier must be the same ones Ameritech uses, subject to any third party restrictions Ameritech may be subject to.

3.1.2. Creation of Technical Specification: Translation of a new service description into a technical specification including engineering requirements for Ameritech's network. The technical specification must detail how the service interacts in the network, translated in network

terms, should include any expected/anticipated feature interaction discrepancies, and will include the process flows on how the service traverses the network.

3.1.3. Service Logic Design: The development of service design from SCP perspective to include Algorithms, Data Structures and Flow Diagrams.

3.1.4. Service Logic Coding: Development of machine logic in the SCE to include tables, SIBBs, and other elements as necessary.

3.1.5. Service Logic Testing: Service logic testing isolated within the to SCE to ensure accuracy of compilation and code development and compliance with Ameritech's AIN environment.

3.1.6. SMS Interface Requirements: Development of Requesting Carrier SMS interface access including screens, flow-through interface and reports. This is required to allow Requesting Carrier to activate, update, modify, and administer Customer data associated with the new service.

3.1.7. Platform Access Logic Configuration: Service specific updates to global infrastructure required to enable new service. Includes modification of the access logic to enable a new service.

3.1.8. Service Integration Testing (SIL): Intensive laboratory testing of service in conjunction with all Ameritech Switch types and or provider switch types and generics (as necessary) to minimize potential feature interaction conflicts and negative network reactions. Resources must be made available to Requesting Carrier on a nondiscriminatory basis.

3.1.9. Network Implementation: Conditioning of the SMS, SCP, SSP, or STP to accept service including network translations, signaling connectivity, dialing plans, and coordination of provisioning process.

3.1.10. Field Testing: Comprehensive controlled testing in a live switch environment, possibly at Requesting Carrier's SSP location.

### **3.2. AIN Service Management System Access Service.**

3.2.1. Access to Ameritech's AIN service management system functionality will be provided in a nondiscriminatory manner to Requesting Carrier to enable it to manage AIN services located wholly within Ameritech's network (SCP & SSP) or to manage AIN services where the service logic is located within Ameritech's SCP and the Customer is served from Requesting Carrier's AIN-compatible SSP. Upon request of Requesting Carrier, Ameritech shall provide Requesting Carrier the unbundled AIN Applications Access service product description and a list of existing Ameritech AIN applications.

3.2.2. The Service Management System (SMS) is the administration system for the service logic and data in the Advanced Intelligent Network (AIN) Service Control Point (SCP). The SMS contains the master copy of service level, subscriber level and subscription level data. The SMS also contains a copy of the service logic.

Logical access to the SMS will be managed by a set of programs designed by Ameritech. These programs provide security for the data that resides on the AIN platforms by allowing user access to only specific data that is appropriate to the customer or carrier. Whether explicitly stated in this document or not, all access to the SMS is managed through these programs. The only exceptions to managed access to SMS functionality are for the Ameritech Network Services organizations that administer the AIN platforms. They require direct access in order to appropriately administer the platforms.

Mediated access to SMS functionality will be provided through interface programs that will be developed for specific services. Requesting Carrier will have access to all of the data that the service requires in order to administer that service for its Customers. This includes service level, subscriber level, and subscription level data as well as any reports and measurement data that is mutually agreed upon by Ameritech and Requesting Carrier.

3.2.3. Service Logic. The SMS receives a copy of the service logic and service management logic from the Service Creation Environment (SCE) system. After population of specific network level and service level data, the SMS downloads a view of the service logic to the designated SCPs. The service management logic remains in the SMS to complement SMS utilities in the monitoring and administration of a specific service.

It is required that all of the Service Creation unit testing, System Integration Lab (SIL) testing and Network Deployment Testing has been completed.

It may be necessary for Requesting Carrier to negotiate timing and supply service specific data before that service can be deployed in the appropriate SCPs. Ameritech, however, is totally responsible for service logic deployment and initial SCP memory load in its network. Requesting Carrier will receive timing and supply of service specific data in a nondiscriminatory manner.

3.2.4. Service Administration. Service administration involves the management of service level data which the service logic requires for its execution. SMS supports the management of service specific common data. Any changes to the data representation of the Ameritech network, which impact one or more carrier services will be administered by Ameritech. Other Requesting Carrier specific or service specific data changes will be identified and administered by Requesting Carrier.



## **SCHEDULE 9.2.6**

### **OPERATIONS SUPPORT SYSTEMS FUNCTIONS**

**1.0 Pre-Ordering, Ordering and Provisioning.** Ameritech will use the Provisioning EI for the transfer and receipt of data necessary to perform the pre-ordering, ordering, and provisioning functions (e.g., order entry, telephone number and due date selection). However, the Access Services Request (ASR) interface will be used for the transfer of information concerning Network Elements ordered by Requesting Carrier.

**2.0 Maintenance and Repair.** Ameritech will use the Maintenance EI described in **Section 10.13.3(a)** for the transfer and receipt of data necessary to perform the maintenance and repair functions (e.g., trouble receipt and trouble status).

**3.0 Billing.** Ameritech will provide appropriate usage data to Requesting Carrier to facilitate Customer billing with attendant acknowledgments and status reports and exchange information to process claims and adjustments.

## **SCHEDULE 9.2.7**

### **OPERATOR SERVICES AND DIRECTORY SERVICES**

**1.0 Operator Services.** Operator Services consist of the following services.

1.1 Manual Call Assistance - manual call processing with operator involvement for the following:

(a) Calling card - the Customer dials 0+ or 0- and provides operator with calling card number for billing purposes.

(b) Collect - the Customer dials 0+ or 0- and asks the operator to bill the call to the called number, provided such billing is accepted by the called number.

(c) Third number billed - the Customer dials 0+ or 0- and asks the operator to bill the call to a different number than the calling or called number.

(d) Operator assistance - providing local and intraLATA operator assistance for the purposes of:

- (1) assisting Customers requesting help in completing calls or requesting information on how to place calls;
- (2) handling emergency calls;
- (3) handling credits and coin telephone local refund requests; and
- (4) handling person-to-person calls.

(e) Operator Transfer Service (“OTS”) - calls in which the Customer dials “0”, is connected to an Ameritech operator and then requests call routing to an IXC subscribing to OTS. The operator will key the IXC’s digit carrier identification code to route the Customer to the requested IXC’s point of termination.

(f) BLV - Service in which operator verifies a busy condition on a line.

(g) BLVI - service in which operator, after verifying a busy line, interrupts the call in progress.

1.2 Automated Call Assistance - mechanized call processing without operator involvement for the following:

- (a) Automated calling card service ("ACCS") - the Customer dials 0 and a telephone number, and responds to prompts to complete the billing information.
- (b) Automated Alternate Billing Service ("AABS") -
  - (1) the Customer dials 0 and a telephone number and responds to prompts to process the call and complete the billing information (Customer branding not currently available).
  - (2) ACCS calculates charges, relates the charge to the Customer, and monitors coins deposited before connecting the 1 + intraLATA or interLATA call.

1.3 Line Information Database ("LIDB") Validation - mechanized queries to a LIDB for billing validation.

1.4 Database Access - To the extent technically feasible, Ameritech will provide access to databases used in the provisioning of Operator Services via Requesting Carrier's Bona Fide Request.

**2.0 Directory Assistance.** Directory Assistance ("DA") service shall consist of the following services.

2.1 Directory Assistance - those calls in which the Customer dial digits designated by Requesting Carrier to obtain Directory Assistance for local numbers located within his/her NPA. Two listings will be provided per call.

2.2 Branding - the ability to put messages on the front end of a DA call that is directly trunked into Ameritech's DA switch.

2.3 Information Call Completion - provides a Customer who has accessed the DA service and has received a number from the Audio Response Unit (□ARU□) the option of having an intraLATA call completed by pressing a specific digit on a touch tone telephone. Information Call Completion is only available to Requesting Carrier if it direct trunks its DA calls to Ameritech.

2.4 Upon request, and through a technically feasible arrangement, Ameritech will provide access to databases used in the provisioning of DA via Requesting Carrier's Bona Fide Request at rates that recover Ameritech's costs of developing, providing and maintaining the

service. Such unbundled access to the DA database shall be for the purpose of having Requesting Carrier's Telephone Exchange Service DA listing in the area placed into Ameritech's DA database, or to enable Requesting Carrier to read DA listing in the database so that Requesting Carrier can provide its own DA service.

**3.0 Rate Application.** Ameritech shall bill Requesting Carrier the applicable rates on a monthly basis, in accordance with the following methodology:

3.1 Manual Call Assistance - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls, whether or not they are completed.

3.2 Automated Call Assistance (ACCS and AABS) - call occurrences multiplied by the per call occurrence rate. Total call occurrences shall include all processed calls, whether or not they are completed.

3.3 LIDB Validation - validation occurrences multiplied by the LIDB validation per occurrence rate. Total validation occurrences shall include all validations, whether or not the call is completed. Ameritech will accumulate operator occurrences, automated occurrences, and LIDB validation occurrences via its Operator Services Call Analysis System ("OSCAS"). OSCAS utilizes TOPS AMA recordings to produce monthly summaries of mechanized and manual call occurrences.

3.4 BLV - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.5 BLVI - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.6 Lost Records. If Ameritech is responsible for lost, destroyed, or mutilated TOPS AMA recordings, Ameritech will not bill Requesting Carrier for those calls for which there are no records. Likewise, Ameritech shall not be held responsible by Requesting Carrier for lost revenue. However, if within ninety (90) days, actual data should become available, Ameritech will bill Requesting Carrier for those calls using actual data.

## SCHEDULE 9.5

### PROVISIONING OF NETWORK ELEMENTS

#### 1.0 General Provisioning Requirements.

- 1.1 Requesting Carrier may order from Ameritech multiple individual Network Elements on a single order without the need to have Requesting Carrier send an order for each such Network Element if such Network Elements are (i) for a single type of service, (ii) for a single location, and (iii) for the same account and Requesting Carrier provides on the order the same detail as required when such Network Elements are ordered individually.
- 1.2 Ameritech shall provide provisioning services to Requesting Carrier Monday through Friday from 8:00 a.m. to 5:00 p.m. CST. Requesting Carrier may request Ameritech to provide Saturday, Sunday, holiday, and/or off-hour provisioning services. If Requesting Carrier requests that Ameritech perform provisioning services at times or on days other than as required in the preceding sentence, Ameritech shall quote, within three (3) Business Days of Requesting Carrier's request, a cost-based rate for such services. If Requesting Carrier accepts Ameritech's quote, Ameritech shall perform such provisioning services.
- 1.3 Ameritech shall provide a Single Point of Contact ("**SPOC**") for ordering and provisioning contacts and order flow involved in the purchase and provisioning of Ameritech's unbundled Network Elements. The SPOCs shall provide an electronic interface 5:30 a.m. to 10:30 p.m., CST, Monday through Friday and 5:30 a.m. to 6:00 p.m., CST on Saturdays. Each SPOC shall also provide to Requesting Carrier a telephone number (operational from 8:00 a.m. to 5:00 p.m. CST, Monday through Friday) which will be answered by capable staff trained to answer questions and resolve problems in connection with the provisioning of Network Elements.
- 1.4 Ameritech shall provide to Requesting Carrier a single point of contact (the "**Unbundling Ordering Center**") for ordering unbundled Network Elements. A telephone number will be provided from 7:00 a.m. to 5:00 p.m. CST, Monday through Friday. This Unbundling Ordering Center is responsible for order acceptance, order issuance, and return of the Firm Order Confirmation (FOC) to Requesting Carrier as specified in this **Schedule 9.5.**

In addition, Ameritech shall provide to Requesting Carrier a single point of contact (the "**Unbundling Service Center**") for all provisioning, maintenance, repair, and cutover coordination. A telephone number will be provided from

06:30 a.m. to 12:00 a.m. CST Monday through Friday. Out of hours maintenance questions are handled by a "**Fold Down Center.**"

- 1.5 Ameritech will recognize Requesting Carrier as the Customer of Record of all Network Elements ordered by Requesting Carrier and will send all notices, invoices and pertinent Customer information directly to Requesting Carrier.
- 1.6 Ameritech will provide Requesting Carrier with a FOC for each order within forty-eight (48) hours of Ameritech's receipt of that order, or within a different time interval agreed upon by the Implementation Team. The FOC must contain an enumeration of Requesting Carrier's ordered Network Elements features, options, physical Interconnection, quantity, and Ameritech commitment date for order completion (the "**Committed Due Date**"), which Committed Due Date shall be established on a nondiscriminatory basis with respect to installation dates for comparable orders at such time.
- 1.7 Upon work completion, Ameritech will provide Requesting Carrier electronically with a completed order confirmation per order that states when that order was completed.
- 1.8 Ameritech will perform pre-testing of Network Elements in accordance with Ameritech's standards. At Requesting Carrier's request, Ameritech will make available to Requesting Carrier on a weekly batch basis any available test and turn-up results in support of the Network Elements ordered by Requesting Carrier. Requesting Carrier shall be responsible for any costs incurred by Ameritech to provide copies of any available results. If Requesting Carrier requests Ameritech to provide Requesting Carrier with any test or turn-up results which Ameritech does not then generate, Requesting Carrier shall request such results through the Bona Fide Request process.
- 1.9 As soon as identified, Ameritech shall provide notification electronically of Requesting Carrier orders that are incomplete or incorrect and therefore cannot be processed.
- 1.10 As soon as identified, Ameritech shall provide notification electronically of any instances when Ameritech's Committed Due Dates are in jeopardy of not being met by Ameritech on any element or feature contained in any order for a Network Element. Ameritech shall indicate its new Committed Due Date as soon as such date is available.
- 1.11 Ameritech shall provide to Requesting Carrier upon request:

- (a) a list of all services and features technically available from each switch that Ameritech may use to provide Local Switching, by switch CLLI;
- (b) a listing by street address detail, of the service coverage area of each switch CLLI;
- (c) when available, all engineering design and layout information for each Network Element; provided that Requesting Carrier shall pay Ameritech for the costs incurred by Ameritech to provide Requesting Carrier with copies of such information;
- (d) a listing of all technically available functionalities for each Network Element; and
- (e) advanced information on the details and requirement for planning and implementation of NPA splits.

1.12 Promptly after the Effective Date, at Requesting Carrier's request Ameritech shall provide Requesting Carrier an initial electronic copy of the following information:

- (a) Street address verification;
- (b) Switch identification by service address; and
- (c) Switch feature verification.

Electronic updates to such information shall be provided monthly to Requesting Carrier as changes are made to such information.

1.13 For orders of Network Elements (and INP with the installation of a Loop) that require coordination among Ameritech, Requesting Carrier and Requesting Carrier's Customer, Requesting Carrier shall be responsible for any necessary coordination with the Requesting Carrier Customer.

## **2.0 Unbundled Local Loop Transmission**

### **2.1 Access to Unbundled Local Loops.**

2.1.1 Requesting Carrier shall access Ameritech's Unbundled Local Loops either via Collocation or in accordance with **Article IX** of this Agreement at the Ameritech Central Office where that element exists and each Loop shall be delivered to Requesting Carrier's Collocation by means of a Cross-Connection, which shall be an additional charge.

2.1.2 Ameritech shall provide Requesting Carrier access to its unbundled Loops at each of Ameritech's Central Offices. In addition, if Requesting Carrier requests one or more Loops serviced by Integrated Digital Loop Carrier or Remote Switching technology deployed as a Loop concentrator, Ameritech shall, where available, move the requested Loop(s) to a spare, existing physical Loop at no charge to Requesting Carrier. If, however, no spare physical Loop is available, Ameritech shall within forty-eight (48) hours of Requesting Carrier's request notify Requesting Carrier of the lack of available facilities. Requesting Carrier may then at its discretion make a Bona Fide Request for Ameritech to provide the unbundled Loop through the demultiplexing of the integrated digitized Loop(s). Notwithstanding anything to the contrary in this Agreement, the provisioning intervals set forth in **Section 2.2.2** of this Schedule and the Ameritech Network Element Performance Benchmarks set forth in **Schedule 9.10** of this Agreement shall not apply to unbundled Loops provided under this **Section 2.1.2**.

2.1.3 If Requesting Carrier orders a Loop type and the distance requested on such Loop exceeds the transmission characteristics as referenced in the corresponding Technical Reference specified below, distance extensions may be requested where technically feasible to meet the specification using such distance extensions. Requesting Carrier shall compensate Ameritech for the costs incurred to provide such distance extensions.

Loop Type	Technical Reference/Limitation
Electronic Key Line	2.5 miles
ISDN	Bellcore TA-NWT-000393
HDSL 2W	T1E1 Technical Report Number 28
HDSL 4W	T1E1 Technical Report Number 28
ADSL 2W	ANSI T1.413-1995 Specification



## 2.2 Provisioning of Unbundled Loops.

The following coordination procedures shall apply for conversions of "live" Telephone Exchange Services to unbundled Network Elements:

2.2.1 Requesting Carrier shall request unbundled Loops from Ameritech by delivering to Ameritech a valid electronic transmittal service order (a "**Service Order**") using the electronic interface described on **Schedule 9.2.6**. Within forty eight (48) hours of Ameritech's receipt of a Service Order, Ameritech shall provide Requesting Carrier the FOC that sets forth the Committed Due Date according to the applicable Ameritech Network Element Performance Benchmarks set forth in **Section 9.10** of this Agreement by which the Loop(s) covered by such Service Order will be installed.

2.2.2 Ameritech shall provision unbundled Loops in accordance with the time frames set forth on **Schedule 9.10** or within such other intervals as agreed upon by the Parties.

2.2.3 Ameritech and Requesting Carrier shall coordinate to designate, at least forty-eight (48) hours prior to the Committed Due Date, a scheduled conversion date and time (the "**Scheduled Conversion Time**") in the "**A.M.**" (12:00 midnight to 12:00 noon) or "**P.M.**" (12:00 noon to 12:00 midnight) (as applicable, the "**Conversion Window**").

2.2.4 Not less than one (1) hour prior to the Scheduled Conversion Time, either Party may contact the other Party and unilaterally designate a new Scheduled Conversion Time (the "**New Conversion Time**"). If the New Conversion Time is within the Conversion Window, no charges shall be assessed on or waived by either Party. If, however, the New Conversion Time is outside of the Conversion Window, the Party requesting such New Conversion Time shall be subject to the following:

If Ameritech requests the New Conversion Time, the applicable Line Connection Charge shall be waived; and

If Requesting Carrier requests the New Conversion Time, Requesting Carrier shall be assessed a Line Connection Charge in addition to the Line Connection Charge that will be incurred for the New Conversion Time.

2.2.5 Ameritech shall test for Requesting Carrier dial-tone ("**Dial Tone Test**") at Ameritech's MDF for Requesting Carrier's Virtual Collocated equipment or Physical Collocated equipment during a window not greater than forty-eight (48) hours but not less than eight (8) hours prior to the Scheduled Conversion Time (or New Scheduled Time, as applicable). Ameritech shall perform the Dial Tone Test at no charge for one Contract Year. Thereafter, Ameritech shall recover from Requesting Carrier for Dial Tone Test on

a time and materials basis any costs (as defined in Section 252(d) of the Act) for providing such Dial Tone Test.

2.2.6 Except as otherwise agreed by the Parties for a specific conversion, the Parties agree that the time interval expected from disconnection of “live” Telephone Exchange Service to the connection of an unbundled Network Element at the Requesting Carrier Collocation interface point will be sixty (60) minutes or less. If a conversion interval exceeds sixty (60) minutes and such delay is caused solely by Ameritech (and not by a Delaying Event), Ameritech shall waive the applicable Line Connection Charge for such element. If Requesting Carrier has ordered INP with the installation of a Loop, Ameritech will coordinate the implementation of INP with the Loop conversion during the sixty (60) minute interval at no additional charge.

2.2.7 Requests for maintenance or repair of unbundled Loops are initiated using the industry standard “electronic bonding” interface (EBI) and are handled by the Ameritech Unbundling Service Center (“USC”). The USC works with local Ameritech personnel to perform any manual testing that may be required to isolate the trouble.

### **3.0 Network Interface Device Capability.**

3.1 Ameritech will provide Requesting Carrier access to NIDs in a manner that will permit Requesting Carrier to connect its loop facilities to the Customer's inside wiring through Ameritech's NID, as required. Requesting Carrier shall establish this connection through an adjoining NID provided by Requesting Carrier.

3.2 Due to the wide variety of NIDs utilized by Ameritech (based on Customer size and environmental considerations), Requesting Carrier may access the Customer's inside wire by any of the following means:

- (a) Where an adequate length of inside wire is present and environmental conditions permit, Requesting Carrier may remove the inside wire from Ameritech's NID and connect that wire to Requesting Carrier's NID;
- (b) Enter the Customer access chamber or “side” of “dual chamber” NID enclosures for the purpose of extending a connectorized or spliced jumper wire from the inside wire through a suitable “punch-out” hole of such NID enclosures;
- (c) Enter Ameritech's loop terminal enclosure located at a multiple dwelling unit (“MDU”) for the purpose of accessing Customer premises inside wire and extending such wire to Requesting Carrier's own adjoining NID; or

- (d) Request Ameritech to make other rearrangements to the inside wire terminations or terminal enclosure on a time and materials cost basis to be charged to the requesting party (i.e., Requesting Carrier, its agent, the building owner or the Customer).

To the extent that Ameritech completes any of the work described in this **Section 3.2**, Ameritech shall bill the time and materials charges associated with such work to the party that requested such work (i.e., Requesting Carrier, its agent, the building owner or the Customer).

3.3 In no case shall Requesting Carrier remove or disconnect Ameritech's loop facilities from Ameritech's NIDs, enclosures, or protectors.

3.4 In no case shall Requesting Carrier remove or disconnect ground wires from Ameritech's NIDs, enclosures, or protectors.

3.5 Maintenance and control of premises wiring (inside wire) is the responsibility of the Customer. Any conflicts between service providers for access to the Customer's inside wire must be resolved by the Customer.

3.6 Due to the wide variety of NID enclosures and outside plant environments, Ameritech will work with Requesting Carrier to develop specific procedures to establish the most effective means of implementing this **Section 3.0**.

#### **4.0 Unbundled Local Switching**

##### **4.1 Access to Unbundled Local Switching.**

4.1.1 Requesting Carrier shall access Ameritech's Unbundled Local Switching via Collocation or in accordance with **Article IX** of this Agreement at the Ameritech Central Office where that element exists and each line-side and/or trunk-side port will be delivered to Requesting Carrier's Collocation by means of a Cross-Connection, which shall be an additional charge.

4.1.2 Ameritech shall provide Requesting Carrier access to its Unbundled Local Switching at each of Ameritech's Central Offices and will provide Requesting Carrier all available basic local switching functions and basic capabilities the switch is capable of providing which Ameritech currently makes available to its local Customers, or for which Ameritech OSS functions are capable of provisioning pursuant to a Bona Fide Request.

4.1.3 Unbundled Local Switching also provides access to additional features and capabilities that the switch has available for activation. Requesting Carrier has the capability of activating these features on a line-by-line basis via an electronic interface.

The additional features available for activation on the basic Unbundled Local Switching include:

- (a) vertical features;
- (b) Custom Calling, Custom Local Area Signaling Service features (☐CLASS☐) features; and
- (c) Centrex features.

4.1.4 Other basic and/or additional capabilities, functions and features that are not then available for activation on the switch may be requested as optional special capabilities. Ameritech will provide these special capabilities if technically feasible and upon Requesting Carrier's Bona Fide Request. Requesting Carrier will pay the applicable recurring and nonrecurring costs of developing, installing, providing and maintaining the requested capability.

4.1.5 Ameritech will provide any technically feasible customized local routing of traffic through Unbundled Local Switching by class of call (e.g., operator, directory assistance, 9-1-1, toll, local, etc.). Ameritech will develop and provide any requested customized routing the switch is capable of providing, upon agreement by Requesting Carrier to pay recurring and nonrecurring costs of developing, installing, updating, providing and maintaining such custom routing.

4.1.6 The custom routing feature enables Requesting Carrier to specify special routing, by class of call, all traffic originating in its unbundled local switch using any technically feasible routing capability of that switch. Variations in the End Office switching equipment used to provide service in specific locations may cause differences in the operation of certain features. Switch feature functionality capabilities that are not otherwise available (i.e., features that the switch is capable of providing) will be developed on an individual basis through the Bona Fide Request process and will be installed, updated, maintained and provided following Requesting Carrier's agreement to pay the applicable costs.

## **4.2 Provisioning of Unbundled Local Switching.**

The following coordination procedures shall apply for conversions of "live" Telephone Exchange Services to unbundled Network Elements:

4.2.1 Requesting Carrier shall request Unbundled Local Switching from Ameritech by delivering to Ameritech a valid electronic transmittal service order (a "Service Order") using the Provisioning EI. In addition, pre-ordering functions are supported via electronic data interchange (EDI) format as utilized for Resale Services. Within forty eight (48) hours of Ameritech's receipt of a Service Order, Ameritech shall

provide Requesting Carrier the FOC that sets forth the Committed Due Date by which the Unbundled Local Switching ports covered by such Service Order will be installed.

4.2.2 Requesting Carrier shall request the development and establishment of a custom routing pattern via a Bona Fide Request. While the custom routing pattern is being developed, Requesting Carrier may do one of the following: (a) defer activation of the Unbundled Local Switching port until the routing pattern is established or (b) offer the Customer resale on an interim basis.

4.2.3 Ameritech and Requesting Carrier shall coordinate to designate, at least forty-eight hours prior to the Committed Due Date, a scheduled conversion date and time (the "**Scheduled Conversion Time**") in the "**A.M.**" (12:00 midnight to 12:00 noon) or "**P.M.**" (12:00 noon to 12:00 midnight) (as applicable, the "**Conversion Window**").

4.2.4 Not less than one (1) hour prior to the Scheduled Conversion Time, either Party may contact the other Party and unilaterally designate a new Scheduled Conversion Time (the "**New Conversion Time**"). If the New Conversion Time is within the Conversion Window, no charges shall be assessed on or waived by either Party. If, however, the New Conversion Time is outside of the Conversion Window, the Party requesting such New Conversion Time shall be subject to the following:

If Ameritech requests the New Conversion Time, the applicable Line Connection Charge shall be waived; and

If Requesting Carrier requests the New Conversion Time, Requesting Carrier shall be assessed a Line Connection Charge in addition to the Line Connection Charge that will be incurred for the New Conversion Time.

4.2.5 Except as otherwise agreed by the Parties for a specific conversion, the Parties agree that the time interval expected from disconnection of "**live**" Telephone Exchange Service to the connection of an unbundled Network Element at the Requesting Carrier Collocation interface point will be sixty (60) minutes or less. If a conversion interval exceeds sixty (60) minutes and such delay is caused solely by Ameritech (and not by a Delaying Event), Ameritech shall waive the applicable Line Connection Charge for such element. Ameritech shall provide to Requesting Carrier equivalent functionality of blocking calls (e.g., 900, 976 and international calls) as provided to Ameritech's retail Customers.

4.2.6 When ordering Unbundled Local Switching, Requesting Carrier may order from Ameritech separate interLATA and intraLATA capabilities (i.e., 2 PICs where available) on a line or trunk basis.

4.2.7 Unless otherwise directed by Requesting Carrier and to the extent technically feasible when Requesting Carrier orders Unbundled Local Switching, all telephone numbers currently associated with that line port shall be retained without loss of feature capability.

4.2.8 Ameritech's provision and Requesting Carrier's use of ULS shall be subject to the provisions of Section 7.1 and Schedule 7.1.

#### 4.3 Tandem Switching.

4.3.1 Tandem Switching creates a temporary transmission path between interoffice trunks that are interconnected at a switch for the purpose of routing a call or calls. Unbundled Tandem Switching is ordered using electronic interfaces. Trunk-side ports are ordered using the Access Service Request ("ASR") which provides for electronic ordering based on industry standards adopted through OBF. ASR is the process used as of the Effective Date to order Exchange Access Services. Both pre-ordering and ordering functions and access to associated Operations Support Systems functions are supported electronically through these interfaces.

4.3.2 Ameritech will service, operate, and maintain the unbundled Tandem Switching for Requesting Carrier at parity with the service, operation, and maintenance Ameritech provides to itself, its subsidiaries, Affiliates and any other person. Unless requested otherwise, where applicable and technically feasible, Ameritech will provide unbundled Tandem Switching using the same specifications, interfaces, parameters, intervals, procedures and practices it uses to provide comparable Tandem Switching for all other Customers and carriers. Any feature or function existing in the Tandem Switch will be provided to Requesting Carrier on a non-discriminatory basis. Congestion control and overflow routing will be provided on a non-discriminatory basis.

### 5.0 **Interoffice Transmission Facilities.**

5.1 Ameritech shall offer Interoffice Transmission Facilities in each of the following ways:

5.1.1 As a dedicated transmission path (e.g., DS1, DS3, OC3, OC12 and OC48) dedicated to Requesting Carrier as described in Section 1.1 of Schedule 9.2.4.

5.1.2 As a shared transmission path as described in Section 1.3 of Schedule 9.2.4.

5.2 Where Dedicated Transport or Shared Transport is provided, it shall include (as appropriate):

5.2.1 The transmission path at the requested speed or bit rate.

5.2.2 The following optional features are available; if requested by Requesting Carrier, at additional cost:

5.2.2.1 Clear Channel Capability per 1.544 Mbps (DS1) bit stream.

5.2.2.2 Ameritech provided Central Office multiplexing:

(a) DS3 to DS1 multiplexing; and

(b) DS1 to Voice/Base Rate/128, 256, 384 Kbps Transport multiplexing.

5.2.3 If requested by Requesting Carrier, the following are available at an additional cost:

5.2.3.1 1+1 Protection for OC3, OC12 and OC48.

5.2.3.2 1+1 Protection with Cable Survivability for OC3, OC12 and OC48.

5.2.3.3 1+1 Protection with Route Survivability for OC3, OC12 and OC48.

5.3 Ameritech shall:

5.3.1 Provide Requesting Carrier exclusive use of Interoffice Transmission Facilities dedicated to Requesting Carrier in the case of Dedicated Transport, or non-exclusive access to the features, functions, and capabilities of Interoffice Transmission Facilities shared by more than one Customer or carrier, including Requesting Carrier, in the case of Shared Transport;

5.3.2 Provide all technically feasible transmission facilities, features, functions, and capabilities that Requesting Carrier could use to provide Telecommunications Services;

5.3.3 Permit, to the extent technically feasible, Requesting Carrier to connect such Interoffice Transmission Facilities to equipment designated by Requesting Carrier, including Requesting Carrier's Collocated facilities; and

5.3.4 Permit, to the extent technically feasible, Requesting Carrier to obtain the functionality provided by Ameritech's digital cross-connect systems separate from Dedicated Transport.

#### 5.4 Technical Requirements.

This **Section 5.4** sets forth the technical requirements for Dedicated Transport:

5.4.1 When Ameritech provides Dedicated Transport as a facility, the entire designated transmission facility (e.g., DS1, DS3) shall be dedicated to Requesting Carrier designated traffic.

5.4.2 Ameritech shall offer Dedicated Transport in all the currently available technologies including DS1 and DS3 transport facilities and SONET point-to-point transport facilities, at all standard transmission bit rates, except subrate services, where available.

5.4.3 For DS1 facilities, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office □CI to CO□ connections in the applicable technical references set forth under Interoffice Transmission Facilities in the Technical Reference Schedule.

5.4.4 For DS3 facilities and higher rate facilities, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office □CI to CO□ connections in the applicable technical references set forth under Interoffice Transmission Facilities in the Technical Reference Schedule.

5.4.5 When requested by Requesting Carrier, Dedicated Transport shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits. When physical diversity is requested by Requesting Carrier, Ameritech shall provide the maximum feasible physical separation between intra-office and inter-office transmission paths (unless otherwise agreed by Requesting Carrier). Any request by Requesting Carrier for diversity shall be subject to additional charges.

5.4.6 Upon Requesting Carrier's request and its payment of any additional charges, Ameritech shall provide immediate and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, Requesting Carrier's traffic.



5.4.7 Ameritech shall offer the following interface transmission rates for Dedicated Transport:

5.4.7.1 DS1 (Extended SuperFrame - ESF, D4);

5.4.7.2 DS3 (M13 shall be provided);

5.4.7.3 SONET standard interface rates in accordance with the applicable ANSI technical references set forth under Interoffice Transmission Facilities in the Technical Reference Schedule.

5.4.8 Upon Requesting Carrier's request, Ameritech shall provide Requesting Carrier with electronic reconfiguration control of a Requesting Carrier specified Dedicated Transport through Ameritech Network Reconfiguration Service (ANRS) on the rates, terms and conditions in F.C.C. Tariff No. 2.

5.4.9 Ameritech shall permit, at applicable rates, Requesting Carrier to obtain the functionality provided by DCS together with dedicated transport in the same manner that Ameritech offers such capabilities to IXCs that purchase transport services. If Requesting Carrier requests additional functionality, such request shall be made through the Bona Fide Request process.

## **6.0 Signaling Networks and Call-Related Databases**

### **6.1 Signaling Networks.**

6.1.1 If Requesting Carrier purchases Switching Capability from Ameritech, Ameritech shall provide access to its signaling network from that switch in the same manner in which Ameritech obtains access to such switch itself. In addition, Ameritech shall provide Requesting Carrier access to Ameritech's signaling network for each of Requesting Carrier's switches when Requesting Carrier uses its own switching facilities. This connection shall be made in the same manner as Ameritech connects one of its own switches to an STP. Notwithstanding the foregoing, Ameritech shall not be required to unbundle those signaling links that connect Service Control Points to STPs or to permit Requesting Carrier to link its own STPs directly to Ameritech's switch or call-related databases.

6.1.2 If Requesting Carrier has its own switching facilities, Ameritech shall provide Requesting Carrier access to STPs to each of Requesting Carrier's switches, in the same manner in which Ameritech connects one of its own switches to an STP, or in any other technically feasible manner (e.g., bringing an "A" link from Requesting Carrier's switch to Ameritech's STP, or linking Requesting Carrier's switch to its own STP

and then connecting that STP to Ameritech's STP via a "B" or "D" link); provided that Ameritech shall not be required to (i) unbundle the signaling link connecting SCPs to STPs, (ii) permit direct linkage of Requesting Carrier's own STPs to Ameritech's switch or call-related databases or (iii) unbundle an SCP from its associated STP.

6.1.3 The Parties shall agree upon appropriate mediation facilities and arrangements for the Interconnection of their signaling networks and facilities, as necessary to adequately safeguard against intentional and unintentional misuse of the signaling networks and facilities of each Party. Such arrangements shall provide at a minimum:

- Certification that Requesting Carrier's switch is compatible with Ameritech's SS7 network;
- Certification that Requesting Carrier's switch is compatible with Ameritech's AIN SCP;
- Certification that Requesting Carrier's switch is compatible with a desired AIN application residing on Ameritech's SCP;
- Agreement on procedures for handling maintenance and troubleshooting related to AIN services;
- Usage of forecasts provided by Requesting Carrier, so that Ameritech can provide sufficient SS7 resources for Requesting Carrier and all other requesting carriers;
- Mechanisms to control signaling traffic at agreed-upon levels, so that Ameritech's SS7 resources can be fairly shared by all requesting carriers;
- Mechanisms to restrict signaling traffic during testing and certification, as necessary to minimize risks to the service quality experienced by Customers served by Ameritech's network and those of other carriers while compatibility and interconnection items are verified; and
- Mechanisms to ensure protection of the confidentiality of Proprietary Information of both carriers and Customers.

## 6.2 Call-Related Databases.

6.2.1 For purposes of switch query and database response through a signaling network, Ameritech shall provide Requesting Carrier access to its call-related databases, including the Line Information Database, Toll Free Calling database, downstream number portability databases, and Advanced Intelligent Network databases by means of physical access at the STP linked to the unbundled database.

6.2.2 If Requesting Carrier purchases Unbundled Local Switching, Requesting Carrier may, upon request, use Ameritech's SCP in the same manner, and via the same signaling links, as Ameritech. If Requesting Carrier has deployed its own switch, and has linked that switch to Ameritech's signaling system, Requesting Carrier shall be given access to Ameritech's SCP in a manner that allows Requesting Carrier to provide any call-related, database-supported services to Customers served by Requesting Carrier's switch. If the Implementation Team is unable to agree in the Implementation Plan to appropriate mediation mechanisms with respect to access to the AIN SCPs, the Parties shall adopt the mechanisms adopted by the Commission. Ameritech shall provide Requesting Carrier access to call-related databases in a manner that complies with the CPNI requirements of Section 222 of the Act.

6.2.3 The Parties shall agree upon appropriate mediation facilities arrangements for the Interconnection of their signaling networks, databases, and associated facilities, as necessary to adequately safeguard against intentional and unintentional misuse of the signaling networks and facilities of each Party. Such arrangements shall provide for at a minimum:

- Capabilities to protect each Party's information;
- Agreements on handling maintenance and troubleshooting related to AIN services;
- Usage forecasts provided by Requesting Carrier so that Ameritech can provide sufficient resources for other requesting carriers, and capabilities to ensure that the Parties abide by such forecasts;
- Procedures to ensure, prior to deployment, that each service will properly operate within Ameritech's network;
- Procedures to verify proper deployment of each service in the network; and
- Mechanisms to ensure protection of the confidentiality of proprietary information of both carriers and customers.

### 6.3 Service Management Systems.

6.3.1 Ameritech shall provide Requesting Carrier with the information necessary to enter correctly, or format for entry, the information relevant for input into Ameritech's Service Management System (☐SMS☐). In addition, Ameritech shall provide Requesting Carrier equivalent access to the SMS to design, create, test, and deploy Advanced Intelligent Network.

6.3.2 Access to the SMS will be provided in an equivalent manner to that which Ameritech currently uses to provide such access to itself (e.g., submitting magnetic tapes if Requesting Carrier inputs magnetic tapes, or through an electronic interface equivalent to that used by Requesting Carrier). The Implementation Team shall set forth in the Implementation Plan the terms and conditions relating to such access. If the Implementation Team is unable to agree to appropriate mediation mechanisms with respect to access to the AIN SMSs and SCEs, the Parties shall adopt the mechanisms adopted by the Commission.

6.3.3 Ameritech shall provide access to its SMS in a manner that complies with the CPNI requirements of Section 222 of the Act.

## 7.0 **Operations Support Systems Functions**

7.1 Ameritech shall provide Requesting Carrier access to, and Requesting Carrier shall use the, Operations Support Systems functions on or before the dates set forth on the Implementation Schedule.

7.2 Ameritech shall also provide Requesting Carrier access to and Requesting Carrier shall use the functionality of any internal gateway systems Ameritech employs in performing the OSS functions described in **Schedule 9.2.6** for its own Customers. A "gateway system" means any electronic interface Ameritech has created for its own use in accessing support systems for providing any of such OSS functions.

## 8.0 **Operator Services and Directory Services.**

8.1 Ameritech shall provide Requesting Carrier access to Ameritech's Operator Service and Directory Assistance facilities where technically feasible.

8.2 Ameritech shall provide unbundled Operator Services ("OS") and Directory Assistance ("DA") to Requesting Carrier in conjunction with Telephone Exchange Service provided to Requesting Carrier as a purchaser of Resale Services and as an Unbundled Local Switching Network Element or directly as a separate Network Element. A list identifying the NPA/Exchange areas of Ameritech Directory Assistance, and dependent Information Call Completion services will be provided to Requesting Carrier and will be updated as such DA services are provided in additional NPA/Exchange Areas.

8.3 Requesting Carrier will obtain any required custom routing and obtain or provide the necessary direct trunking and termination facilities to the mutually agreed upon meet point with Ameritech facilities for access to unbundled OS and DA services. Requesting Carrier is responsible for delivering its OS and DA traffic to Ameritech's operator service switch. Specifically, Requesting Carrier shall deliver its traffic direct from the End Office to the operator service switch location, and there can be no Tandem Switching for OS. The operator service location to which Requesting Carrier will deliver its OS or DA traffic will be determined by Ameritech based on the existing capacity of its service centers. Ameritech will, if technically feasible, enable Requesting Carrier to deliver its OS or DA traffic to the operator service switch most closely located to the Requesting Carrier's NPA/exchange originating the call.

8.4 Ameritech will provide and maintain the equipment at its OS and DA centers necessary to perform the services under this Agreement, with the goal of ensuring that the OS and DA service meets current industry standards.

8.5 Ameritech will provide OS and DA in accordance with its then current internal operating procedures and/or standards.

8.6 Ameritech will maintain a quality of service that will satisfy the standards, if any, established by the Commission having jurisdiction over the provision of such service. Requesting Carrier has the right, once annually, to visit each Ameritech owned or subcontracted office upon reasonable notice to Ameritech or with greater frequency by mutual consent of the Parties. Upon request, Ameritech will provide monthly system results regarding speed of answer, average work time and, for DA only, abandon from queue measurements.

8.7 Requesting Carrier is solely responsible for providing all equipment and facilities to deliver OS and DA traffic to the point of Interconnection with Ameritech facilities.

8.8 Requesting Carrier will provide and maintain the equipment at its offices necessary to permit Ameritech to perform its services in accordance with the equipment operations and traffic operations which are in effect in Ameritech's DA and OS offices. Requesting Carrier will locate, construct, and maintain its facilities to afford reasonable protection against hazard and interference.

8.9 Upon request and to the extent technically feasible, Ameritech will unbundle OS and DA from resellers of its Telephone Exchange Service so that Requesting Carrier can provide its own OS or DA service or obtain it from a third party. Also, upon request, Ameritech will provide unbundled OS and/or DA as a stand alone unbundled Network Element to Requesting Carrier. In either case, Requesting Carrier is required to obtain any required custom routing and obtain and/or to provide other facilities, services and Network Elements necessary to deliver its OS and DA traffic to Ameritech's designated office, or to the office of another provider, as applicable.

8.10 Upon request of Requesting Carrier, Ameritech shall provide access to Requesting Carrier of the name, address and telephone directory information of Ameritech's

Telephone Exchange Service Customers so that Requesting Carrier can provide its own DA Service. Access to such listings shall be provided on the terms and conditions set forth in a separate listings license agreement between the parties.

8.11 Upon request, and as technically feasible, Ameritech will provide through an electronic interface, unbundled access to its databases used to provide DA and OS for purpose of enabling Requesting Carrier to provide its own OS or DA service. Such unbundled access to DA and OS databases is provided as is technically feasible based upon the facilities, equipment and software involved, and upon agreement by Requesting Carrier to pay to Ameritech its costs of developing, installing, providing and maintaining such Network Element.

8.12 Specifically, upon request, Ameritech will provide through an electronic interface, unbundled access to its DA database to permit Requesting Carrier to have its local exchange directory assistance listings in the areas incorporated into the database, and/or to read the DA listing (with the exception of non-published listing) in that database for the purpose of providing its own DA service. Such unbundled access will be provided in a technically feasible manner based upon the facilities, equipment and software involved, and upon agreement by Requesting Carrier to pay to Ameritech its costs of developing, installing, providing and maintaining such Network Element.

8.13 Access of resellers and Requesting Carrier to DA and OS of Ameritech, and the DA and OS Network Elements provided hereunder, whether provided on a bundled or unbundled basis, will, as applicable and as feasible, be provided through the standard interfaces, parameters, intervals, service descriptions, protocols, procedures, practices and methods that Ameritech uses for other customers of its DA and OS services.

8.14 Requesting Carrier will furnish to Ameritech all information necessary for provision of OS and DA. This information, to the extent it is identified as such, shall be treated as Proprietary Information. For OS this information includes emergency agency phone numbers, rate information (such as mileage bands and operator surcharge information), and originating screening information.

8.14.1 To the extent that Requesting Carrier does not mirror Ameritech's operator surcharge rates, then Ameritech will, if technically feasible, enter Requesting Carrier's surcharge rates into Ameritech's rate tables, and will charge Requesting Carrier for changing those tables at the rates then charged by Ameritech for such service.

8.14.2 For DA services, Requesting Carrier will furnish Ameritech ninety (90) days (or such earlier time as the Parties may agree upon) before DA service is initiated details necessary to provide that service. This information includes listing information for the areas to be served by Ameritech and network information necessary to provide for the direct trunking of the DA calls.

8.14.3 Requesting Carrier will keep these records current and will inform Ameritech, in writing, at least thirty (30) days prior to any changes in the format to be

made in such records. Requesting Carrier will inform Ameritech of other changes in the records on a mutually agreed-upon schedule.

8.15 Upon request, and as technically feasible, Ameritech will re-brand such OS and DA services based upon Requesting Carrier's obtaining or providing any required facilities, services, Network Elements and custom routing, and their agreement to pay rates that compensate Ameritech for any costs it incurs in developing, installing, providing and maintaining such rebranded service. For branding of calls, Requesting Carrier must provide two (2) cassette tapes of an announcement, no longer than three (3) seconds, for installation on each OS and DA switch serving Requesting Carrier's Customers.

8.16 Branding: Re-branding is available as follows:

- (a) Mechanized front-end branding is available for all manual and automated OS calls.
- (b) Mechanized back-end branding is available for automated calling card calls handled via ACCS.
- (c) On mechanized collect and billed-to-third calls, back-end branding is not currently available.
  - (1) Such calls can be manually handled and branded.
  - (2) If Customer desires mechanized branding, the feature can be installed if Requesting Carrier pays for feature purchase and installation.

Normally, OS and DA services, both bundled and unbundled, will be branded with Ameritech's name as the provider of the service. Upon request from Requesting Carrier, and as technically feasible, Ameritech will re-brand OS and DA traffic from Requesting Carrier's telephone exchange lines, or to Requesting Carrier's unbundled OS or DA network element. Re-branded service requires that Requesting Carrier arrange to have the subject OS or DA traffic delivered to Ameritech's Central Office on separate trunks, which may require that it obtain custom routing, and obtain or provide such trunks and other applicable facilities.

Re-branding is provided at rates that recover Ameritech's costs of developing, installing, providing and maintaining such service.

8.17 Requesting Carrier grants to Ameritech during the term of this Agreement a non-exclusive license to use the DA listings provided pursuant to this Agreement. DA listings provided to Ameritech by Requesting Carrier under this Agreement will be maintained by Ameritech only for providing DA information, and will not be disclosed to third parties. Nothing in this Agreement shall prohibit Ameritech and Requesting Carrier from entering into a separate agreement which would allow Ameritech to provide or sell Requesting Carrier's DA listing

information to third parties, but such provision or sale would only occur under the terms and conditions of such separate agreement.

8.18 Ameritech will supply Requesting Carrier with call detail information so that Requesting Carrier can rate and bill the call. This information excludes rating and invoicing of Customers, unless negotiated on an individual case basis.